

IN THE CLAIMS:

Please AMEND claims 37-60, 63-65, and 68-71;

Please CANCEL claims 61-62 and 66-67 without prejudice or disclaimer; and

Please ADD claims 72-75, as shown below.

1-36 (Cancelled)

37. (Currently Amended) An apparatus~~analog navigation device~~, comprising:

~~a transmitter configured to generate a light signal;~~

~~a receiver configured to receive the light signal;~~

a light guide having a surface for internally reflecting ~~at~~ the generated light signal from ~~at~~ the transmitter to ~~at~~ the receiver; and

an actuator having an actuator surface, said actuator surface having at least a portion which is movable between a first position spaced apart from a portion of said light guide surface, with a gas or fluid therebetween, and a second position which is in contact with the portion of the light guide surface,

wherein the portion of the light guide surface has a higher refractive index than the portion of the actuator surface, and wherein the portion of the actuator surface has a different refractive index than the gas or fluid, and wherein in use the relative refractive index is changed at a contacted portion of the light guide surface, thereby altering the light signal received by the receiver.

38. (Currently Amended) The apparatus according to~~An analog navigation device~~
~~as recited in~~ claim 37, wherein the receiver is configured to output a signal indicative of
~~the~~ position of the contacted portion of the light guide surface.

39. (Currently Amended) The apparatus~~An analog navigation device~~ according to
claim 37, wherein the receiver is configured to use the received signal to control a
position of an element.

40. (Currently Amended) The apparatus~~An analog navigation device~~ according to
claim 37, wherein the second position is at a selected one of a plurality of portions on the
surface of the light guide.

41. (Currently Amended) The apparatus~~An analog navigation device~~ according to
claim 37, wherein a plurality of transmitters is provided.

42. (Currently Amended) The apparatus~~An analog navigation device~~ according to
claim 41, wherein the transmitters are configured~~arranged~~ to pulse alternatively.

43. (Currently Amended) The apparatus~~An analog navigation device~~ according to
claim 37, wherein a plurality of receivers is provided.

44. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein the transmitter comprises an light-emitting diode~~LED~~.

45. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein the receiver comprises a photodiode.

46. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein four transmitters and a single receiver are provided in a cross configuration having four corners and a center, each one of the transmitters being disposed at one of the corners and the receiver being disposed at the center.

47. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein the light guide includes an optical grating.

48. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein said surface of said actuator comprises a hemispherical surface.

49. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein said surface of said actuator is supported by one or more side walls.

50. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 49, wherein said one or more side walls are deformable.

51. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 37, wherein said surface of said actuator is deformable.

52. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 37, wherein said actuator has an upper portion in the form of a stick for actuation by a user.

53. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 37, wherein said actuator comprises an arcuate disk disposed on said surface of said actuator.

54. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 37, wherein the transmitter and the receiver are disposed in a layer on an opposite side of said light guide to said actuator.

55. (Currently Amended) ~~The apparatus~~An analog navigation device according to claim 37, further comprising a processoring device configured tofor processing the or

each signal received by the or each receiver and outputting a control signal to control ~~the~~ position of ~~an~~the element.

56. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, further comprising a display configured to~~for~~ displaying an element, wherein~~by~~ in use the position of the element on the display is controlled.

57. (Currently Amended) The apparatus~~An analogue navigation device~~ according to claim 37, wherein said received signal is used to produce a radio signal to~~for~~ controlling a radio controlled device.

58. (Currently Amended) The apparatus~~An analog navigation device~~ according to claim 37, wherein the actuator surface is exposed at the exterior of the apparatus~~device~~.

59. (Currently Amended) The apparatus~~A hand held electronic device~~ according to claim 37, wherein the actuator surface is manually actuatable by a user of the apparatus~~device~~.

60. (Currently Amended) The apparatus according to claim 37, wherein the apparatus comprises a~~A hand held electronic device, comprising:~~

~~a transmitter configured to generate a light signal;~~

~~a receiver configured to receive the light signal;~~

~~a light guide having a surface for internally reflecting the light signal from the transmitter to the receiver; and~~

~~an actuator having an actuator surface, said actuator surface having at least a portion which is movable between a first position spaced apart from a portion of said light guide surface, with a gas or fluid therebetween, and a second position which is in contact with the portion of the light guide surface;~~

~~wherein the portion of the light guide surface has a higher refractive index than the portion of the actuator surface, and wherein the portion of the actuator surface has a different refractive index than the gas or fluid, and wherein in use the relative refractive index is changed at a contacted portion of the light guide surface, thereby altering the light signal received by the receiver.~~

61-62 (Cancelled)

63. (Currently Amended) The apparatus according to~~A hand held electronic device as claimed in claim 37~~⁶¹, wherein the actuator surface is actuable by a user via a key of the apparatus~~device~~.

64. (Currently Amended) The apparatus according to~~A hand held electronic device as claimed in claim 63~~, wherein the key comprises part of a keypad.

65. (Currently Amended) A method ~~of navigating, said method~~ comprising:
~~generating a light signal; and~~
reflecting ~~at~~ the generated light signal off a surface,
wherein a relative refractive index between materials on either side of the surface
is changed, thereby altering the reflected light signal, the reflected light signal being
received and used to control a position of an element.

66-67 (Cancelled)

68. (Currently Amended) The apparatus ~~A key device~~ according to claim 3766,
wherein said actuator comprises a key or button.

69. (Currently Amended) The apparatus ~~A key device~~ according to claim 3766,
wherein said apparatus ~~device~~ further comprises a key configured to ~~which~~ moves said
actuator in use.

70. (Currently Amended) The apparatus ~~A key device~~ according to claim 68,
wherein said apparatus ~~device~~ comprises a plurality of keys.

71. (Currently Amended) An apparatus, comprising:

~~transmitter means for transmitting a light signal;~~

~~receiver means for receiving the light signal;~~

light guiding means for guiding light, said light guiding means having a surface for internally reflecting at the generated light signal from ~~the transmitter~~ means to ~~the receiver~~ means; and

~~actuator~~ means for actuating, said actuator means having a surface with at least a portion of which is movable between a first position spaced apart from a portion of the light guide surface, with a gas or fluid therebetween, and a second position in contact with the portion of the light guide surface, the portion of the light guide surface having a higher refractive index than the portion of the actuator surface, and the portion of the actuator surface having a different refractive index than the gas or fluid,

wherein in use the relative refractive index is changed at the contacted portion of the light guide surface, thereby altering the light signal received by the receiver means.

72. (New) The method according to claim 65, further comprising:

outputting a signal indicative of a position of a contacted portion of the surface.

73. (New) The method according to claim 65, further comprising:

processing the or each signal received; and

outputting a control signal to control the position of the element.

74. (New) The method according to claim 65, further comprising:
displaying the element, wherein in use the position of the element on a display is controlled.

75. (New) The method according to claim 65, wherein said received signal is used to produce a radio signal to control a radio controlled device.